Tides and Currents Guided Notes

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is a current?

* A **\_\_\_\_\_\_\_\_** is a stream of water flowing in the ocean.
* A **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is an ocean current that moves along the top of the ocean.

How currents form

* Surface currents are moved by **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Surface Currents

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ are winds that blow in regular directions all the time.
* Currents that flow from the equator are \_\_\_\_\_\_\_\_.
* Currents that flow from the poles are \_\_\_\_\_\_\_\_\_\_\_

Current Direction

* Surface currents move in huge \_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_ = clockwise

\_\_\_\_\_\_\_\_\_\_ = Counterclockwise

Gulf Stream

* The Gulf Stream is a \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ that flows \_\_\_\_\_\_\_ up the east coast of the U.S.
* The current that sweeps southward past the states of Washington, Oregon, and California is \_\_\_\_\_\_\_\_\_\_\_\_\_.

Questions

1.

2.

3.

4.

What are tides?

* A **\_\_\_\_\_\_\_\_** is the regular change in the \_\_\_\_\_\_\_\_\_ of the ocean surface.
* Low water level = **\_\_\_\_\_\_\_ tide.**
* High water level =**\_\_\_\_\_\_\_ tide**.

Causes of tides

* The ocean tides are caused by the gravitational \_\_\_\_\_\_ of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 

As the Earth rotates on its \_\_\_\_\_\_\_\_\_\_, tide levels \_\_\_\_\_\_ and \_\_\_\_\_\_\_.

Changing tides

* \_\_\_\_\_\_ hours in a day
	+ \_\_\_\_ High tides
	+ \_\_\_\_ Low tides
	+ \_\_\_\_ ÷ \_\_\_\_ = \_\_\_\_\_ hours
* The time between the changing \_\_\_\_\_\_\_ is about every \_\_\_\_\_ hours & \_\_\_\_\_ minutes.

Flood Tides/Ebb tides

* A flood tide is the incoming \_\_\_\_\_\_\_ tide.
* An ebb tide is the \_\_\_\_\_\_\_\_\_ tide. (the water is leaving)

Questions:

1.

2.

3.

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